

REMARKS

The Office Action dated 17 June 2002, claims 3, 4, and 5 have been amended to clarify subject matter that the Applicants regard as their invention without narrowing the scope of the amended claims. No new matter has been added. Claims 1-11 are pending in this patent application. Reconsideration of the claims is respectfully requested.

In paragraph 3 on page 2 of the Office Action, claims 3-5 are rejected under 35 U.S.C. § 112 second paragraph for being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention.

The Applicants respectfully traverse this rejection, but have amended the application to overcome the rejections. Claims 3-5 have been amended. It is believed that all claims comply with 35 U.S.C. § 112.

In paragraph 5 on page 3 of the Office Action, claims 1, 2 and 6 are rejected under 35 U.S.C. §102 (e) as being anticipated by Ghosh et al.

The Applicants respectfully traverse this rejection for the following reasons.

In particular, Applicants' claim 1 sets forth, among other steps, a method of controlling the transmission power used in a digital radio link in a system where a base station and a personal station are parties to the radio connection. During operation between them, either party may send a power control command, which will change the transmission power of the other party. The method comprising when a transmission rate of the first party changes, the first party informs the second party of the new transmission rate. The method further comprises that in response to the new transmission rate the second party changes the power control command to be sent to

the first party to be in accordance with the new transmission rate and the first party changes the reception of its own power control command to be in accordance with the new transmission rate.

In other words, Applicants claimed invention allows power control commands to be sent from a first party to a second party, or from a second party to a first party. Further, when the transmission rate of either party changes, the frequency of transmission of the power control commands from that party also changes.

Ghosh is different than Applicants' claimed invention because in Ghosh, the power control command is not changed in response to the new notified transmission rate, in contrast to Applicants' claims, but is rather changed in response to a change in power compared to a threshold value. (See FIG. 7 in conjunction with column 3 line 49 to column 4 line 26). Whereas Ghosh requires a lookup table to compare the energy estimated in step 72 to first, second, third, and fourth thresholds, Applicants' claimed invention, on the other hand, changes the power control in response to the transmission rate change.

In addition, Ghosh does not teach or disclose that a party changes the reception of its own power control command to be in accordance with the new transmission rate, which is also in contrast to Applicants' claimed invention. Ghosh merely discloses that the mobile adjusts its power as directed by the power control command, but there is no mention of any change as to its reception of power control commands.

Applicants respectfully submit that claim 1 patentably distinguishes over Ghosh and is in condition for allowance.

Dependent claims 2 and 6, which are dependent from independent claim 1, are also rejected under 35 U.S.C. §102(e) as being unpatentable over Ghosh. While Applicants do not acquiesce with the particular rejections to these dependent claims, it is believed that these rejections are now moot in view of the remarks made in connection with independent claim 1. These dependent claims include all of the limitations of the base claim and any intervening claims, and recite additional features which further distinguish these claims from the cited references. Therefore, dependent claims 2 and 6 are also in condition for allowance.

In paragraph 7 on page 4 of the Office Action, claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ghosh in view of Padovani et al.

In paragraph 7 on page 4 of the Office Action, claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ghosh in view of Lui.

In paragraph 8 on page 5 of the Office Action, claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ghosh in view of Love et al.

The Applicants respectfully traverse these rejections for the following reasons.

Claims 5, 7, and 10 are dependent upon claim 1, which has been shown to patentably distinguish over Ghosh taken alone or in combination with any other reference that fails to teach at least changing the power control command in response to the new transmission rate or changing the reception of its own power control command to be in accordance with the new transmission rate, as discussed above. The Office Action fails to show how Padovani, Lui, or Love remedies the deficiencies of the Ghosh with

respect to these features. Claims 5, 7, and 10 patentably distinguish over claims 5, 7, and 10 and are in condition for allowance.

CONCLUSION


In view of the amendments and reasons provided above, it is believed that all pending claims are in condition for allowance. The amendments clarify the patentable invention without adding new subject matter. Applicants respectfully request favorable reconsideration and early allowance of all pending claims.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's agent of record, Michael T. Wallace, at 952-253-4127.



Respectfully submitted,

Date: September 16, 2002 By:


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Appendix A
Marked Up Version of the Entire Claim Set

1 1. (Unchanged) A method of controlling the transmission power used in a
2 digital radio link in a system where a base station and a personal station are parties to
3 the radio connection and during operation between them either party may send a
4 power control command, which will change the transmission power of the other party,
5 the method comprising:

6 when a transmission rate of the first party changes, the first party informs the
7 second party of the new transmission rate; and

8 in response to the new transmission rate the second party changes the power
9 control command to be sent to the first party to be in accordance with the new
10 transmission rate, the first party changes the reception of its own power control
11 command to be in accordance with the new transmission rate.

1 2. (Unchanged) The method as defined in claim 1, wherein when the
2 transmission rate of the second party changes:

3 the first party will change the power control command to be sent to the second
4 party; and

5 the second party will change the reception of its own power
6 control command.

1 3. (Twice Amended) The method as defined in claim 1, wherein when the
2 transmission rate of the first party decreases the second party will decrease [the] a
3 frequency of power control commands to be sent to the first party and,
4 correspondingly, when the transmission rate increases, the second party will increase
5 the frequency of power control commands.

1 4. (Twice Amended) The method as defined in claim 1, wherein the power
2 control command is formed of a plurality of bits and when the transmission rate of the
3 first party is decreased, the second party will shorten [the] a length of the power
4 control command and, correspondingly, when the transmission rate is increased the
5 second party will extend the length of the power control command.

1 5. (Twice Amended) The method as defined in claim 1, wherein when the
2 transmission rate of the first party is decreased, the second party will lower [the] an
3 energy of power control commands to be sent to the first party and, correspondingly,
4 when the transmission rate of the first party is increased, the second party will
5 increase the energy of power control commands.

1 6. (Unchanged) The method as defined in claim 1, wherein the change in
2 transmission rate of the first party is declared in a field of a transmission frame
3 reserved for this purpose.

1 7. (Unchanged) The method as defined in claim 1, wherein the change in
2 transmission rate of the first party is declared by changing a structure of a
3 transmission frame directly to correspond with the new transfer rate.

1 8. (Unchanged) The method as defined in claim 1, wherein the power
2 control command transmits at first and second transfer rates, the second transfer rate
3 being lower than the first transfer rate, of which the second transfer rate is used when
4 the transmission of the commanded party is in a DTX state.

1 10. (Unchanged) The method as defined in claim 1, wherein when the power
2 control command changes, a size of the transmitter's power control step is also
3 changed.

1 11. (Unchanged) The method as defined in claim 1, wherein the power
2 control command in one direction is changed in reverse proportion to a load of the
3 opposite transfer direction.